

Application Serial No.: 09/824,772  
Reply to Office Action dated June 13, 2005

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-5, 7-21, and 23-29 are presently active in this case, Claims 1, 3, 5, and 12 having been amended and Claims 6 and 22 having been canceled without prejudice or disclaimer by way of the present Amendment.

The Applicant respectfully requests the entry of the amendments set forth herein as the amendments clearly place the application into condition for allowance.

Claims 5, 12, 14, 16, 21, 24, 26, and 28 were indicated as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 5 and 12 have been rewritten in independent form. Therefore, Claims 5 and 12 and the claims that depend therefrom are in condition for allowance.

Claims 11, 13, 15, 17, 23, 25, 27, and 29 were also indicated as containing allowable subject matter.

Claim 6 was objected to for an informality. Claim 6 has been canceled without prejudice or disclaimer, thereby rendering this objection moot.

In the outstanding Official Action, Claims 1-4 and 8 were rejected under 35 U.S.C. 102(e) as being anticipated by Ahmadvand (U.S. Patent No. 6,477,670). Claims 9 and 10 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmadvand in view of Sarkkinen et al. (U.S. Patent Pub. No. 2001/0033582 A1). Claims 7 and 18-20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmadvand in view of Johansson et al.

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(U.S. Patent No. 6,437,399). For the reasons discussed below, the Applicant traverses the art rejections.

In the Office Action, the Ahmadvand reference is indicated as anticipating independent Claim 1. However, the Applicant notes that a claim is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). As will be demonstrated below, the Ahmadvand reference clearly does not meet each and every limitation of the independent Claim 1.

Claim 1 of the present application recites a system for transmitting data over a physical resource, comprising a layer configured to manage the physical resource and to guarantee a quality of service, wherein access to the physical resource is divided into transmission time intervals, a first sub-layer configured to supply a transmission support in accordance with the quality of service and to segment the data into transmission units, the first sub-layer reducing a size of at least one of the transmission units when transmission conditions on the physical resource are degraded, a second sub-layer configured to transmit at least one of the transmission units over the physical resource during each of the transmission time intervals, the transmission time interval being a periodic time interval during which the second sub-layer is allowed to access the physical resource, and a physical layer configured to perform error correction coding or decoding of the data. The Applicant submits that the Ahmadvand reference does not disclose all of the limitations recited in Claim 1.

The Official Action indicates in reply to the arguments submitted by the Applicant that the Ahmadvand reference describes in column 5, lines 57-61, a time for receiving and

multiplexing RLC frames on different transport channels (25) to transmit to the physical layer for propagation to the receiving end, which is consideration as a transmission time interval or periodic time interval, and only during these transmission time intervals or periodic time intervals, the MAC sub-layer (80) can access the physical resource. However, the Applicant respectfully submits that the Ahmadvand reference never mentions or suggests time intervals when discussing multiplexing onto transport channels (25), which interface the physical layer (20) to the data link layer (30). The Ahmadvand reference merely mentions delivery of “the RLC frames over logical channels 15 to the MAC sublayer 80 to be multiplexed onto different transport channels 25.” The timing of the multiplexing is not discussed, nor is timing with respect to access to the physical layer (20).

Claim 1 expressly recites that access to the physical resource is divided into transmission time intervals, which are defined as a periodic time interval during which the second sub-layer is *allowed to* access the physical resource. Such a configuration is neither disclosed, nor inherent in the system of the Ahmadvand reference. The Ahmadvand reference does not discuss intervals in which the MAC sublayer (80) is *allowed to* access the physical layer (20), but rather it merely discusses transport channels that provide an interface between the physical layer (20) and the data link layer (30). Periods of time during which access to the physical layer (20) is allowed, or denied, are not discussed. The Official Action appears to reply upon the general statement that the transport channels (25) provide an interface between the data link layer (30) and the physical layer (20) as a teaching of such intervals, since such an interface presumes that there are times where access is allowed. However, such a teaching clearly does not anticipate the system defined in Claim 1. Clearly,

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the Ahmadvand reference does not discuss access to the physical layer (20) being divided into transmission time intervals during which the MAC sublayer (80) is allowed to access the physical layer (20). No mention is made of such a divisional of time intervals, and such intervals are not obvious in view of the teachings in the Ahmadvand reference absent hindsight considerations.

Claim 1 further recites a second sub-layer that is configured to transmit at least one of the transmission units over the physical resource during *each* of the transmission time intervals during which the second sub-layer is allowed to access the physical resource. No such teaching is present in the Ahmadvand reference. As mentioned above, the Ahmadvand reference does not discuss intervals in which the MAC sublayer (80) is allowed to access the physical layer (20), or whether at least one transmission unit is transmitted by the MAC sublayer (80) over the physical layer (20) during *each* of such intervals.

The Applicant respectfully submits that the Ahmadvand reference clearly does not disclose the notion of transmission time intervals being a periodic time interval as defined in Claim 1 of the present application, for the reasons discussed above. Accordingly, the Applicant respectfully submits that the Ahmadvand reference does not disclose all of the limitations expressly recited in Claim 1 of the present application, and therefore the Ahmadvand reference does not anticipate Claim 1.

Accordingly, the Applicant requests the withdrawal of the anticipation rejection of Claim 1.

Claims 2-4, 7-10, and 18-20 are considered allowable for the reasons advanced for Claim 1 from which they depend. These claims are further considered allowable as they

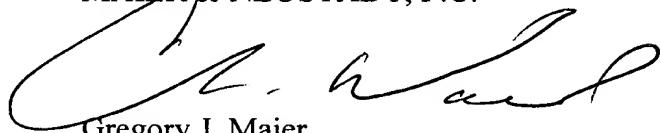
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recite other features of the invention that are neither disclosed nor suggested by the applied references when those features are considered within the context of Claim 1.

Consequently, in view of the above discussion, it is respectfully submitted that the present application is in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully Submitted,

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